



Owner's Manual for Coaster Brake Bicycles

This Owner's Manual contains assembly, operation, and maintenance instructions.

WARNING:

- Check operation of brakes every time before bicycle is ridden.
- The rider must wear a helmet.
- Do not ride at night.
- Check on local bicycle laws before bicycle is ridden.
- Read the entire Owner's Manual before bicycle is assembled, ridden, or maintenance work is performed.

HBC Limited Warranty

Part or model specifications are subject to change without notice.

This Limited Warranty is the only warranty for your HBC bicycle. There are no other express warranties. The only uses for this product are described in this manual. Warranty registration is not required. The Limited Warranty extends only to the original consumer and is not transferable to anyone else.

What does this Limited Warranty cover?

This Limited Warranty covers all parts of the bicycle.

What must you do to keep the Limited Warranty in effect?

This Limited Warranty is effective only if:

- the bicycle is completely and correctly assembled;
- the bicycle is used under normal conditions for its intended purpose (see the following section for excluded activities);
- the bicycle receives all necessary maintenance and adjustments.

What is not covered by this Limited Warranty?

The bicycle is designed for general transportation and recreational use only. This Limited Warranty does not cover normal wear and tear, normal maintenance items, or any damage, failure, or loss that is caused by improper assembly, maintenance, adjustment, storage, or use of the bicycle. This Limited Warranty will be void if the bicycle is ever:

- used in any competitive sport;
- used for stunt riding, jumping, aerobatics or similar activity;
- installed with a motor or modified in any other way;
- ridden by more than one person at a time;
- rented;
- used in a manner contrary to the instructions in this Owner's Manual.

HBC will not be liable for incidental or consequential loss or damage due directly or indirectly from use of this product. Some States do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation may not apply to you.

For how long does this Limited Warranty last?

The frame is warranted for life except aluminum frames which are warranted for ten (10) years. The fork is warranted for life except for shock forks which are covered by a one (1) year warranty. All other components are warranted for six (6) months from the date of purchase.

What will HBC do?

HBC will replace, without charge to you, any frame, fork, or component found to be defective by the HBC. The original owner must pay all labor and transportation charges connected with the repair or warranty work.

How do you get service?

Phone HBC Customer Service Department (E.S.T.) at 1-800-872-2453.

What rights do you have?

This warranty gives you specific legal rights. You may also have other rights which vary from State to State.

Owner's Bicycle Identification Record

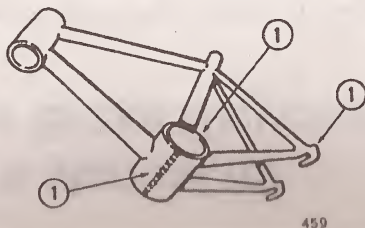
NOTE: This information is only available on the bicycle itself. It is not available from HBC.

Each HBC bicycle has a Model / Serial Number stamped into the frame or printed on a label. The Model / Serial Number [1] can be found on the bottom of the crank housing, on the top of the crank housing, or on the rear of the bicycle as shown. Write this number below to keep it for future reference. If the bicycle is stolen, give this number and a description of the bicycle to the police. This will help them find the bicycle.

You will also need this number if you order parts or request service information from our Customer Service Department. Contact us (EST.) at 1-800-872-2453.

Model / Serial Number _____

Purchase Date _____ Model Name _____



Safety Information

Meanings of the Safety Instructions



This symbol is important. See the word "CAUTION" or "WARNING" which follows it.

The word "CAUTION" is before mechanical instructions. If you do not obey these instructions, mechanical damage or failure of a part of the bicycle can occur.

The word "WARNING" is before personal safety instructions. If you do not obey these instructions, injury to the rider or to others can occur.

The Owner's Responsibility



WARNING: This bicycle is made to be ridden by one rider at a time for general transportation and recreational use. It is not made to withstand the abuse of stunting and jumping.

If the bicycle was purchased unassembled, it is the owner's responsibility to follow all assembly and adjustment instructions exactly as written in this manual and any "Special Instructions" supplied with the bicycle. The owner must make sure all components are securely attached.

If the bicycle was purchased assembled, it is the owner's responsibility, before riding the bicycle for the first time, to make sure the bicycle is assembled and adjusted exactly as written in this manual and any "Special Instructions" supplied with the bicycle. The owner must make sure all components are securely attached.

Fitting the Rider to the Bicycle



To determine the correct size of bicycle for the rider:

- Straddle the assembled bicycle with feet shoulder width apart and flat on the ground
- There must be at least one inch of clearance [1] between the highest part of the top tube [2] and the crotch of the rider
- The minimum leg-length for the rider is the highest part of the top tube plus one inch [3]
- The rider must be able to easily reach and operate the brake levers (if so equipped).

Rules of the Road



WARNING: If this is your child's first bicycle, make sure the child understands and obeys the following "Rules of the Road".



WARNING: Failure of the rider to obey the following "Rules of the Road" can result in injury to the rider or to others.

- Rider must have the skill to operate the bicycle safely. Every bicycle has different handling and operation features. Practice riding on large, flat areas away from traffic and other hazards before riding on the road.
- Always wear a bicycle helmet.
- Do not ride at night.
- Make sure the reflectors of your bicycle are correctly positioned. Do not remove the reflector or replace the reflectors with lighted devices that look similar to reflectors.
- Make yourself more visible to motorists. Wear light-colored or reflective clothing, such as a reflective vest and reflective bands for your arms and legs. Use reflective tape on your helmet. Do not let anything cover the reflectors.
- If the bicycle has 16 inch or smaller wheels, ride only on sidewalks or on your own property. Never ride on the street or in alleys that are used by motor vehicles.
- When riding with training wheels:
 - Ride only on level areas.
 - Do not ride on steep hills, uneven sidewalks, or near steps. The bicycle can tip over if a training wheel goes off the edge of the riding surface.
 - Ride straight up and down sloped surfaces, because the bicycle can tip over when riding across sloped surfaces.
 - Slow down at corners because you can not turn as quickly as bicycles without training wheels.
- Obey all traffic regulations, signs, and signals.
- Always wear shoes.
- Use extra caution in wet weather.
 - Ride slowly on damp surfaces because the tires will slide more easily. Apply the coaster, caliper, or cantilever brakes sooner than normal. Greater stopping distance is necessary, especially if the wheel rims and tires are wet.
- Ride on the right side of the road, in a single file, and in a straight line.
- Be aware of drain grates, soft road edges, gravel or sand, pot holes or ruts, wet leaves, or uneven paving.
 - Avoid these hazards to prevent loss of control or damage to your wheels.
 - Cross railroad tracks at a right angle to prevent the loss of control.

- Avoid unsafe actions while riding.
 - Do not carry any passengers.
 - Do not carry any items or attach anything to your bicycle that could hinder your vision, hearing, or control.
 - Do not ride with both hands off the handlebar.
- If you have an all terrain style bicycle, obey these additional "Rules of Off-Road Riding".
- Always wear the correct safety equipment.
 - Use extreme caution when not riding on pavement.
 - Do not ride in off-road conditions that are beyond your capabilities. Ride trails in relatively flat areas that have few obstacles.
 - Be sensitive to the environment, conscientious of the property on which you ride, and considerate of others you may meet on the trail.

Introduction

This Owner's Manual is made for several different bicycles. Some of the illustrations may not look exactly like the parts of the bicycle, but the instructions are correct. If the bicycle has any parts that are not described in this manual, look for separate "Special Instructions" that are supplied with the bicycle.

Do not dispose of the carton and packaging until you complete the assembly of the bicycle. This can prevent accidentally discarding parts of the bicycle.

NOTE: All of the directions (right, left, front, rear, etc.) in this manual are as seen by the rider while seated on the bicycle.

Attach and use only HBC brand accessories and replacement parts on the bicycle.

Tools Needed



Small Adjustable Wrench
(Jaws must open at least 9/16 inch.)



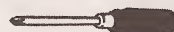
Flat-blade Screwdriver



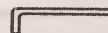
Slip-Joint Pliers



Large Adjustable Wrench
(Jaws must open at least 1 1/4 inch.)



Phillips Screwdriver



Metric Allen Wrenches
(Needed on some models.)

Important Note

Many models come with accessories such as bottles, handlebar fairings, streamers etc... that may affect the order of the assembly of the bicycle. Please look over all of the pieces that come with your new bicycle and refer to the back section of the manual to see if there are any special requirements associated with that accessory before beginning assembly.

Front Wheel

NOTE: If the bicycle does not have a front fender, go on to Step 2.

1. If the bicycle has a front fender [1], attach it to the fork [2] as shown.

NOTE: At first, the screws [9] will not turn easily because they are making the threads in the fork.

2. Assemble the front wheel to the fork as shown:

- If the bicycle has a front caliper brake and the tire will not go down between the brake shoes [4], remove one brake shoe

WARNING: If you remove a brake shoe to install the front wheel, return it to the correct position as written in the "Caliper Brake System - Adjustments" section.

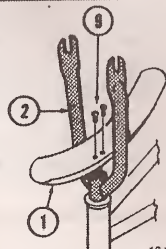
- If the bicycle has a front fender, put each fender brace [5] over the end of the axle [3]
- Make sure the tab of each wheel retainer [6] is in the hole of the fork

NOTE: Some models have a front fork with a built in wheel retention feature. The wheel retainers [6] are not required and will not fit on a fork with this feature.

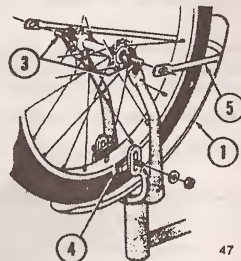
- Using the two nuts [7] with serrations [8], attach the front wheel

WARNING: Do not use the nuts without serrations to attach the front wheel.

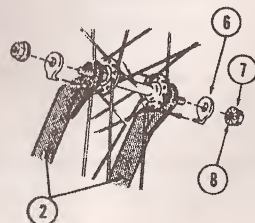
- Put the wheel in the center of the fork and tighten both nuts to the recommended torque of 21 ft.-lbs.



164



47

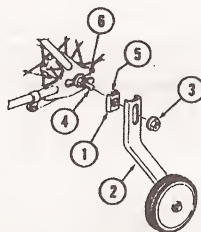


48

Training Wheels

1. Attach the legs to the bicycle frame:

- Put the alignment insert [1], a leg [2], and a nut [3] on each end of the rear wheel axle [4]
- Make sure the tab of the alignment insert [5], is to the rear of the axle and in the slot [6] of the frame
- Make sure both training wheels are the same distance from the ground
- Tighten the nuts securely.



Operation

WARNING: Before each ride, make sure both nuts are tight. Also make sure both training wheels are the same distance from the ground.

As your child's ability and balance improve, you may raise or remove the training wheels.

- To move the training wheels, loosen the nut, slide the leg to the correct position, and retighten the nut.
- To remove the training wheels, remove the nut, leg, and alignment insert.

Front Reflector Bracket and Clear Reflector

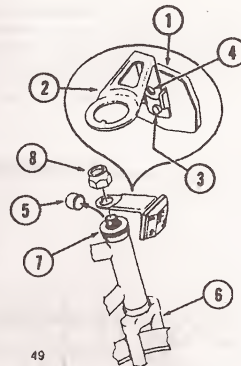
1. Assemble the clear reflector to the front reflector bracket:

WARNING: Install the clear reflector exactly as shown or it will not operate correctly.

- Push the back of the clear reflector [1] onto the front reflector bracket [2]
- Make sure the stud [3] of the clear reflector goes into the hole [4] of the front reflector bracket with a "snap" sound.

2. Attach the hardware to the fork:

- Unscrew and discard the plastic cap [5] on the fork [6]
- Tighten the bearing cone [7] by hand to make sure the bearings are tight
- Install the front reflector bracket and the locknut [8]
- Tighten the locknut
- If necessary, adjust the angle of the front reflector bracket so the clear reflector is vertical (perpendicular to the ground).



Operation and Maintenance

WARNING: For your own safety, do not ride the bicycle if the reflectors are incorrectly installed, damaged, or missing. Make sure the front and rear reflectors are vertical. Do not allow the visibility of the reflectors to be blocked by clothing or other articles. Dirty reflectors do not work well. Clean the reflectors, as necessary, with soap and a damp cloth.

Front Reflector Bracket and Clear Reflector

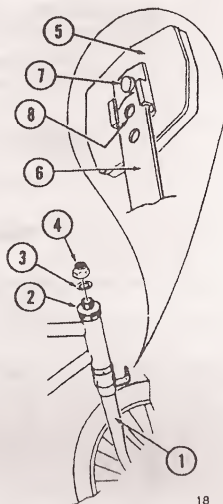
1. Attach the hardware to the fork:

- Unscrew and discard the plastic cap on the fork [1]
- Tighten the bearing cone [2] by hand to make sure the bearings are tight
- Install the keyed washer [3] and the locknut [4]
- Tighten the locknut.

2. Assemble the clear reflector to the front reflector bracket:

WARNING: Install the clear reflector exactly as shown or it will not work correctly.

- Push the back of the clear reflector [5] onto the front reflector bracket [6]
- Make sure the stud [7] of the clear reflector goes into the hole [8] of the front reflector bracket with a "snap" sound
- If necessary, adjust the angle of the front reflector bracket so the clear reflector is vertical (perpendicular to the ground).



18

Operation and Maintenance

WARNING: For your own safety, do not ride the bicycle if the reflectors are incorrectly installed, damaged, or missing. Make sure the front and rear reflectors are vertical. Do not allow the visibility of the reflectors to be blocked by clothing or other articles. Dirty reflectors do not work well. Clean the reflectors, as necessary, with soap and a damp cloth.

Fork Mounted Front Reflector Bracket and Clear Reflector

1. Assemble the clear reflector to the front reflector bracket:

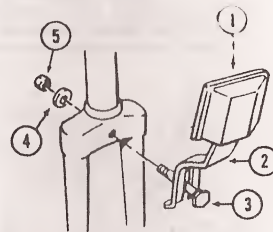
- Put the clear reflector [1] onto the front reflector bracket [2]
- Make sure the studs on the back of the clear reflector go into the holes of the front reflector bracket
- Put a screw through the front reflector bracket and into the clear reflector
- Tighten the screw.



WARNING: Install the clear reflector exactly as shown or it will not operate correctly.

2. Assemble the front reflector bracket and clear reflector to the fork:

- Put the slot of the front reflector bracket over the bolt [3]
- Install washer [4] and nut [5]
- Hold front reflector bracket in position and tighten nut
- If necessary, adjust the angle of the front reflector bracket so the clear reflector is vertical (perpendicular to the ground).



458

Operation and Maintenance

WARNING: For your own safety, do not ride the bicycle if the reflectors are incorrectly installed, damaged, or missing. Make sure the front and rear reflectors are vertical. Do not allow the visibility of the reflectors to be blocked by clothing or other articles. Dirty reflectors do not work well. Clean the reflectors, as necessary, with soap and a damp cloth.

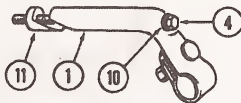
Handlebar and Stem

1. Assemble the stem to the fork:

- If necessary, assemble the stem bolt [4], washer [10], and wedge nut [11] to the stem [1]
- Turn the stem bolt only four revolutions into the wedge nut
- Point the stem toward the front of the bicycle and put it into the locknut [2]
- Put the stem at a comfortable height for the rider

WARNING: To prevent steering system damage and possible loss of control, the "MIN-IN" (minimum insertion) mark on the stem must be inside the locknut.

- Make sure you can not see the "MIN-IN" (minimum insertion) mark [3] on the stem above the locknut
- Tighten the stem bolt just enough that the stem will not fall into the locknut.

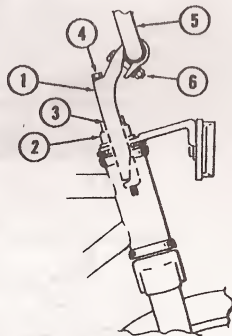


2. Assemble the handlebar to the stem:

- Put the handlebar [5] into the stem, but do not tighten the handlebar clamp [6] at this time
- Align the stem with the front wheel and tighten the stem bolt.

3. Assemble the brake lever(s) to the handlebar:

- Loosen the clamp screw of each brake lever [7]
- If necessary, move the handlebar to each side to install the brake lever(s)
- Put the brake lever(s) on the handlebar with the brake lever for the rear brake on the right side of the handlebar
- Do not tighten the clamp screws of the brake lever(s) at this time.



4. Tighten the stem bolt and the handlebar clamp:

WARNING: Do not overtighten the stem bolt. Overtightening the stem bolt can damage the steering system and cause loss of control.

- Make sure the stem is aligned with the front wheel and tighten the stem bolt.
- Put the handlebar in a comfortable position for the rider

WARNING: If the handlebar clamp is not tight enough, the handlebar can slip in the stem. This can cause damage to the handlebar or stem, and can cause loss of control.

- Tighten the bolt(s) of the handlebar clamp
 - If the handlebar clamp has more than one bolt, tighten the bolts equally.

5. Test the tightness of the stem:

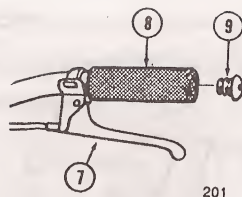
- Straddle the front wheel and hold it between your legs
- Try to turn the front wheel by turning the handlebar
- If the handlebar and stem turn without turning the front wheel, realign the stem with the wheel
- Tighten the stem bolt tighter than before (about 1/2 revolution only at a time)
- Do this test again, until the handlebar and stem do not turn without turning the front wheel.

6. Test the tightness of the handlebar clamp:

- Hold the bicycle stationary and try to move the ends of the handlebar forward or backward
- If the handlebar moves, loosen the bolt(s) of the handlebar clamp
- Put the handlebar in the correct position
- Tighten the bolt(s) of the handlebar clamp tighter than before
 - If the handlebar clamp has more than one bolt, tighten the bolts equally
- Do this test again, until the handlebar does not move in the handlebar clamp.

7. Assemble the grips to the handlebar:

- Mix five drops of liquid soap in a cup of water
- Make the ends of the handlebar and the inside of each grip [8] wet with the mixture
- Using a twisting motion, push each grip fully on the handlebar
- If the grips are open on both ends, push a plastic plug [9] into each end of the handlebar.



WARNING: Use only soap and water to install the grips. The grips may slip while wet. Allow the grips to completely dry before you ride the bicycle.

8. Put the brake levers in the correct position:

- Put each brake lever against the grip in a position that is comfortable to the rider
- Tighten the clamp screw of each brake lever.

Coaster Brake

Operation

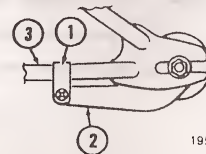
Operate the coaster brake as follows:

- Push the pedals backward to move the chain backward
- The chain activates the coaster brake mechanism that is inside the rear wheel hub
- As you push the pedals backward with increasing force, the braking action of the coaster brake increases.

If your bicycle has a calliper brake(s) in addition to the coaster brake, always use the coaster brake as the main brake to stop the bicycle.

WARNING: If you do not obey the following instructions, injury to the rider or to others can occur.

- When you ride the bicycle the first time, test the coaster brake and practice using it at a low speed in a large level area that is free of obstructions.
- Every time the bicycle is ridden, make sure the clamp [1] on the brake arm [2] is securely attached to the chain stay [3] of the bicycle frame. The coaster brake will not work correctly if the brake arm is not attached to the chain stay.
- Always try to brake while going in a straight line. If you must brake while turning: when the pavement is wet; or when the pavement is covered with sand, gravel, or leaves, start to brake sooner than normal and apply the brake intermittently to reduce the chance of skidding
- Be careful when riding downhill or at a high speed because as your speed increases, a longer distance to stop the bicycle will be necessary. Slow for curves because too much speed can force you to make a turn that is too wide.
- Have the coaster brake repaired by a bicycle service shop the first time you notice that it does not stop the bicycle quickly and smoothly or just does not work as well as it has in the past.



Maintenance

Every two years, more often if you ride in dusty or dirty conditions, have a bicycle service shop clean and lubricate the parts of the coaster brake that are inside the rear wheel hub.

Caliper Brakes

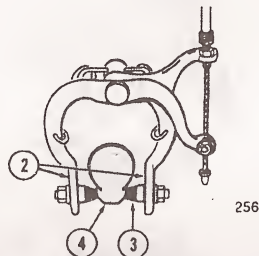
Assembly

WARNING: You must assemble and adjust the caliper brake(s) as written before you ride the bicycle.

Rear Caliper Brake

The rear caliper brake is assembled with slack in the cable wire. Remove the slack from the cable wire:

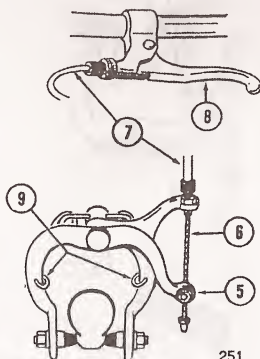
- Have someone squeeze the caliper arms [2] together and hold them so the brake shoes [3] are against the wheel rim [4] until you complete this assembly
- Loosen the nut on the cable clamp [5] of the rear caliper brake just so the cable wire [6] moves through the cable clamp



256

NOTE: On ladies' bicycles, the adjusting barrel and the cable clamp are reversed. Put the cable wire up through the adjusting barrel and the hole in the bolt of the cable clamp. Bend the cable wire toward the frame.

- Put the cable wire down through the adjusting barrel and the hole in the bolt of the cable clamp
- Make sure both ends of the cable sheath [7] are fully in the recesses of the caliper brake and the brake lever [8]
- Make sure both ends of the return spring [9] are hooked around the inside edges of the caliper arms or the studs on the back of the caliper
- Using pliers, pull the cable wire tight
- Hold the cable wire in this position and tighten the nut on the cable clamp.



251

Front Caliper Brake

The front caliper brake of some bicycles is assembled with slack in the cable wire. Test the front caliper brake to determine if the cable wire is slack:

- While looking at the brake shoes of the front caliper brake, squeeze the front brake lever with strong pressure
 - If the brake shoes are against the wheel rim and the brake lever does not touch the grip, the cable wire is not slack. Ignore this "Front Caliper Brake" section and go on to the "Front and Rear Caliper Brakes" section to adjust the caliper brakes.
 - If the brake shoes are not against the wheel rim or if the brake lever touches the grip, the cable wire is slack. Remove the slack from the cable wire:
- Have someone squeeze the caliper arms together and hold them so the brake shoes are against the wheel rim until you complete this assembly
- Loosen the nut on the cable clamp [5] just so the cable wire moves through the cable clamp
- Using pliers, pull the cable wire [6] tight
- Make sure both ends of the cable sheath [7] are fully in the recesses of the caliper brake and the brake lever [8]
- Make sure both ends of the return spring [9] are hooked around the inside edge of the caliper arms or the studs on the back of the caliper
- Hold the cable wire in this position and tighten the nut on the cable clamp.

Front and Rear Caliper Brakes

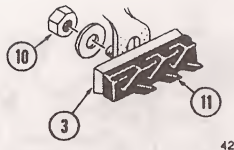
- Test the tightness of the cable clamp of each caliper brake:
 - Squeeze each brake lever with strong pressure
 - If either cable wire moves in the cable clamp of the caliper brake, loosen the nut on the cable clamp
 - Using pliers, pull the cable wire tight but tighten the nut on the cable clamp tighter than before
 - Do the above test again, until the cable wire does not move in the cable clamp of either caliper brake
 - Put a small metal cap onto the end of each cable wire and crimp it onto the cable wire.

2. Put the brake shoes in the correct position:

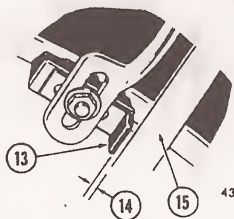
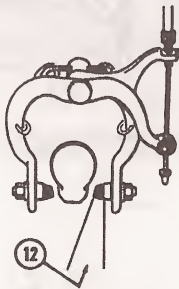
- If you removed a brake shoe to install the front wheel, put the brake shoe on the front caliper brake
- Loosen the nut [10] of each brake shoe
- If the rubbing surface of the brake shoes has arrows [11] as shown, make sure the arrows point toward the rear of the bicycle
- Make sure the rubbing surface of each brake shoe is at the correct angle [12]
 - The entire rubbing surface must be flat against the wheel rim when you operate the brake
 - The brake shoe must not touch the tire when you operate the brake

NOTE: Front caliper brakes do not have brake stops.

- Put the L-shaped brake stop [13] of the rear caliper brake about 1/16 inch [14] from the frame [15]
- Hold each brake shoe (and brake stop) in position and tighten the nut of the brake shoe.



42



43

4. Adjust both caliper brakes before you ride the bicycle:

- Squeeze each brake lever with strong pressure fifteen to twenty times
- Adjust both caliper brakes as written in the "Adjustments" section.

Operation

Operate the caliper brake(s) as follows:

- Squeeze the brake lever located on the handlebar
- The brake lever pulls on a cable wire that is attached to the caliper brake
- The caliper brake squeezes the wheel rim between two brake shoes.

Operate the caliper brakes by slowly and continuously squeezing both brake levers until you feel the braking action. Make a habit of always using both brakes to stop the bicycle. You will stop in the shortest distance by using both brakes.



WARNING: If you do not obey the following instructions, injury to the rider or to others can occur:

- Before you ride the bicycle for the first time, check and adjust the caliper brakes as written in the "Adjustments" section. Then test the caliper brakes and practice using them at low speed in a large and level area that is free of obstructions.
- When correctly used, the caliper brake system is very effective. But, if you apply the front brake too strongly, you can be thrown off the bicycle. Make a habit of always using both brakes to stop the bicycle.
- Always try to brake while going in a straight line. If you must brake while turning: when the pavement is wet; or if the pavement is covered with sand, gravel, or leaves, start to brake sooner than normal and apply the brakes intermittently to reduce the chance of skidding.
- If the wheel rims are wet, start to brake sooner than normal because a longer distance to stop the bicycle will be necessary.
- Be careful when riding downhill or at a high speed because as your speed increases, a longer distance to stop the bicycle will be necessary. Slow for curves because too much speed can force you to make a turn that is too wide.
- Keep wax, oil, grease, etc. off the wheel rims and the brake shoes. These lubricants will reduce brake performance and a longer distance to stop the bicycle will be necessary.
- Check and adjust the caliper brakes the first time they do not stop the bicycle quickly and smoothly, do not stop the bicycle as well as they have in the past, or if either brake lever can touch the grip.

Adjustments

WARNING: If you do not frequently check and clean the caliper brakes, lubricate the cable wires, and make adjustments and repairs as needed, injury to the rider or to others can occur.

1. Make sure the mounting nut [16] of each caliper brake [17] is tight:

- Tighten the mounting nut securely.

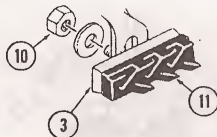


198

2. Check both brake shoes of each caliper brake for wear:

- Replace both of the brake shoes [3] if the arrows [11] on the rubbing surface of either brake shoe is worn off

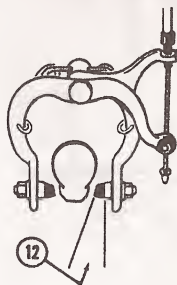
NOTE: If the brake shoes had no original arrows, replace both brake shoes when the rubber block of either one wears to within 1/8 inch from the metal backing.



42

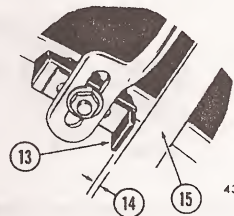
3. Make sure the brake shoes are in the correct position:

- Loosen the nut [10] of each brake shoe
- If the rubbing surface of the brake shoes have arrows [11] as shown, make sure the arrows point toward the rear of the bicycle
- Make sure the rubbing surface of the each brake shoe is at the correct angle [12]
- The entire rubbing surface of the brake shoe must be flat against the wheel rim when you operate the brake
- The brake shoe must not touch the tire when you operate the brake



NOTE: Front caliper brakes do not have brake stops.

- Put the L-shaped brake stop [13] of the rear caliper brake 1/16 inch [14] from the frame [15]
- Hold each brake shoe (and brake stop) in this position and tighten the nut on the brake shoe.

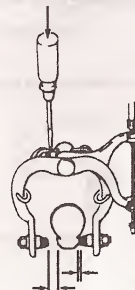
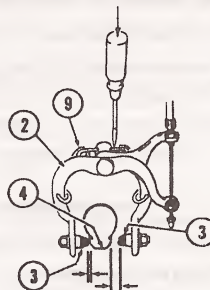


4. Test the tightness of each brake shoe:

- Try to move each brake shoe out of position
- If a brake shoe moves, do Step 4 again, but tighten the nut tighter than before
- Do this test again, until each brake shoe does not move.

5. Make sure the brake shoes of each caliper brake are the same distance from the wheel rim:

- If not, lightly hit downward on the same side of the return spring [9] as the brake shoe [3] that is farther away from the wheel rim [4]
- Make sure both ends of the return spring stay hooked around the inside edge of the caliper arms [2] or the studs on the back of the caliper
- Squeeze the brake lever two or three times
- Do this step again, until both brake shoes are the same distance from the wheel rim.

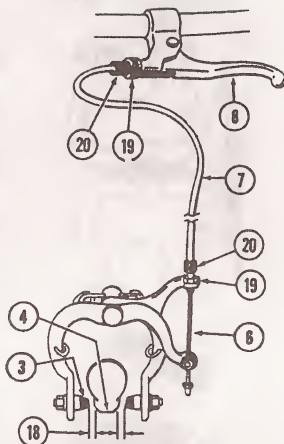


6. Put the brake shoes about 1/16 inch [18] from the wheel rim:

- Loosen the locknut [19]
- Turn the adjusting barrel [20] clockwise to move the brake shoes [3] away from the wheel rim [4]
- Turn the adjusting barrel counterclockwise to move the brake shoes toward the wheel rim.
- Make sure that no brake shoe rubs on the wheel rim when you are not using the brake
 - If rubbing occurs, move the brake shoes away from the wheel rim a small amount

WARNING: Do not move the brake shoes away from a wheel rim that is not true (straight). This can cause the caliper brake to be less effective and unsafe. To allow safe adjustment of the caliper brake, have a bicycle service shop true the wheel.

- Tighten the locknut
- If you can not turn the adjusting barrel counterclockwise far enough to put the brake shoes in the correct position, shorten the cable wire as written in the "Major Cable Adjustment" section.



Major Cable Adjustment - Caliper Brakes

1. Shorten the cable wire between the brake lever and the caliper brake:

- Loosen the locknut and turn it counterclockwise until it is against the adjusting barrel
- Turn the adjusting barrel fully into the brake lever or the caliper brake
 - Turn the adjusting barrel counterclockwise two or three revolutions
- Have someone hold the brake shoes against the wheel rim
- Loosen the nut on the cable clamp

- Using pliers, pull the cable wire tight
- Hold the cable wire in this position and tighten the nut on the cable clamp
- Release the brake shoes.

2. Test the tightness of the cable clamp:

- Squeeze the front brake lever with strong pressure
- If the cable wire moves in the cable clamp, do the Step 1 of this section again, but tighten the nut on the cable clamp tighter than before
- Do this test again, until the cable wire does not move in the cable clamp
- Use the adjusting barrel, as written in previous Step 6, to put the brake shoes 1/16 inch from the wheel rim.

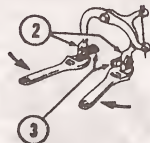
Reducing Caliper Brake Noise "squeak"

It is common for caliper brakes to make noise "squeak" when in use. This noise does not normally indicate a brake problem. If you hear the noise, you can reduce it as follows:

- Make sure the caliper brakes are correctly adjusted
- If the noise continues, move the brake shoes [3] so they "toe-in"
 - Squeeze each brake lever and see how the brake shoes of each caliper brake touch the wheel rim

WARNING: Bend each caliper arm only a small amount. If you bend the caliper arm too far, the caliper brake can be damaged and the performance of the caliper brake can be reduced.

- Using a small adjustable wrench, bend each caliper arm [2] so the front edge of each brake shoe is the first part that touches the wheel rim.

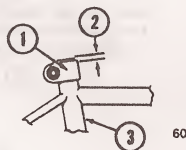


Seat

Assembly

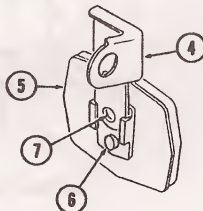
CAUTION: If you disregard these instructions and accidentally drop the seat post into the seat tube, you may not be able to remove it.

1. Push the post clamp [1] down so you can see 1/16 inch [2] of the seat tube [3] above the post clamp. (This may already be done or the clamp may be welded and can not be moved.)



2. Assemble the red reflector to the rear reflector bracket:

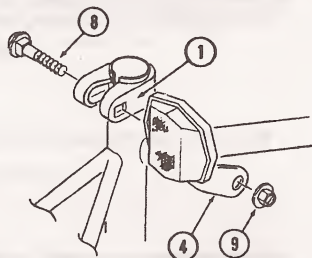
- Push the rear reflector bracket [4] into the back of the red reflector [5]
- Make sure the stud [6] of the red reflector goes into the hole [7] of the rear reflector bracket.



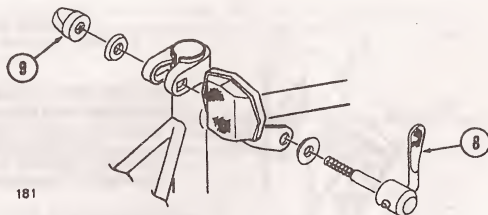
3. Assemble the rear reflector bracket to the post clamp with hardware:

WARNING: Install the rear reflector bracket exactly as shown or the visibility of the red reflector will be reduced.

- Install a bolt [8] and nut [9] or a quick release lever [need # assigned] as shown
- Do not tighten the bolt and nut or quick release lever at this time.



4. If the seat does not come preassembled to the seat post, assemble the seat to the seat post: as shown:



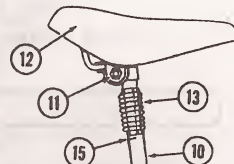
- Make sure the seat post [10] is fully through the seat clamp [11]

- Tighten the seat clamp so the seat [12] stays on the seat post

- If the seat clamp has a nut on each side, tighten both nuts equally.

5. If the bicycle has a seat post bellows or seat post tighters [13], push the bellows or tighters fully onto the seat post.

NOTE: If necessary, push the bellows or tighters together so you can see the "MIN-IN" mark [15] on the seat post.



6. Point the seat forward and put the seat post into the seat tube.

7. Put the seat and the red reflector in the correct position and tighten the post clamp or quick-release lever:

- Put the seat at a comfortable height for the rider

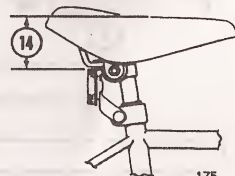


WARNING: Do not ride the bicycle if the "MIN-IN" minimum insertion mark [15] of the seat post is not inside the seat tube.

- Make sure you can not see the "MIN-IN" minimum insertion mark of the seat post above the seat tube

- Make sure there is at least three inches of clearance [14] between the top of the seat and the top of the red reflector

- Make sure the red reflector is vertical and points straight toward the rear of the bicycle



- With the seat and the red reflector in the correct position, tighten the post clamp bolt and nut or quick release lever
- To tighten the quick release lever:
 - Move the lever so it points straight away from the bicycle
 - Tighten or loosen the adjusting nut so the lever meets resistance when the lever is at this position
 - Push the lever down to the closed position.

8. Test the tightness of the seat clamp and the post clamp:

WARNING: Every time you loosen the post clamp, make sure the red reflector is correctly positioned. The red reflector must be vertical, point straight toward the rear of the bicycle, and have three inches of clearance between the top of the seat and the top of the red reflector.

- Try to turn the seat side-to-side and to move the front of the seat up and down
- If the seat moves in the seat clamp
 - Loosen the seat clamp
 - Put the seat in the correct position and tighten the seat clamp tighter than before
 - Do this test again, until the seat does not move in the seat clamp
- If the seat post moves in the seat tube:
 - Put the seat in the correct position and tighten the post clamp tighter than before
 - Do this test again, until the seat post does not move in the seat tube.

Operation and Maintenance

WARNING: For your own safety, do not ride the bicycle if the reflectors are incorrectly installed, damaged, or missing. Make sure the front and rear reflectors are vertical. Do not allow the visibility of the reflectors to be blocked by clothing or other articles. Dirty reflectors do not work well. Clean the reflectors, as necessary, with soap and a damp cloth.

Pedals

CAUTION: There is a right pedal marked "R" and a left pedal marked "L".

The pedal marked "R" has right-hand threads. Tighten it in a clockwise direction.

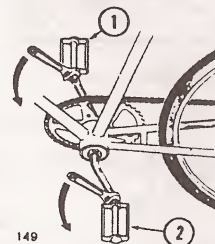
The pedal marked "L" has left-hand threads. Tighten it in a counterclockwise direction.

Make sure you turn the pedal marked "L" into the left side of the crank.

1. Turn the right pedal marked "R" [1] into the right side of the crank and the left pedal marked "L" [2] into the left side of the crank.

2. Tighten the pedals:

- Make sure the threads of each pedal are fully into the crank
- The recommended torque (tightness) for each pedal is 23 ft.-lbs.



Spoke Reflectors

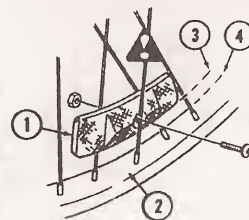
Your bicycle may have one of the following styles of spoke reflectors. Many bicycles will come with the wheel reflectors already attached. If your bicycle does not have the wheel reflectors attached, determine which style you have and follow the instructions.

STYLE 1 - Bolt and nut

Assemble a spoke reflector between the spokes of each wheel as shown:

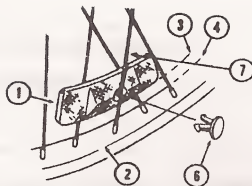
NOTE: If the bicycle has a wheel disc, put the spoke reflector in the notch of the wheel disc. The notch is shaped so the spoke reflector fits into it.

- Make sure the center of each spoke reflector [1] is less than three inches from the inside edge of the wheel rim [2]
- Make sure the curve of the spoke reflector [3] matches the curve of the wheel rim [4]
- Install bolt and nut, then tighten.



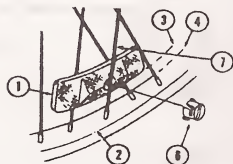
STYLE 2 - Push pin

- Put fastener [6] over a spoke [7] and into each spoke reflector
- Push pin straight into reflector until a "snap" sound is heard.



STYLE 3 - One-quarter turn

- Put fastener [6] over a spoke [7] and into each spoke reflector
- Turn fastener clockwise one-quarter of a turn.



Operation and Maintenance

WARNING: For your own safety, do not ride the bicycle if the reflectors are incorrectly installed, damaged, or missing. Make sure the front and rear reflectors are vertical. Do not allow the visibility of the reflectors to be blocked by clothing or other articles. Dirty reflectors do not work well. Clean the reflectors, as necessary, with soap and a damp cloth.

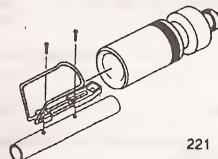
NOTE: Thoroughly wash any water bottle before you use it.

WARNING: Do not use a water bottle while riding. Always fully stop the bicycle before you use the water bottle. Make sure the water bottle stays fully seated in/on the mount, clamp, or cage while you ride.

Water Bottle with Cage (on some models)

Install each cage and water bottle:

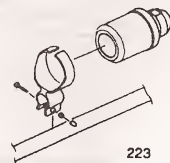
- Using two screws, assemble each cage to the bicycle frame.
- Make sure the open end of each cage points up or toward the front of the bicycle
- Push each water bottle into the cage.



Mini Water Bottle with Clamp (on some models)

Install each clamp and water bottle:

- Assemble the clamp to the down tube so the bottle does not touch the crank or the pedals
- Push a thread protector on the end of the bolt
- Push water bottle onto the mount.



NOTE: Your bicycle may have one of the following accessories. Use the following instructions to install the accessory for your bicycle.

- Make sure that you assemble each accessory so it does not interfere with the correct movement or operation of the steering or the brake lever(s) of the bicycle.



WARNING: Attach a handlebar bag or handlebar and stem bag to the handlebar as written in these instructions:

- Do not attach a handlebar bag to any other part of the bicycle
- Do not carry any items that could hang down and catch in the front wheel
- Do not carry any items in the handlebar bag which weigh more than two pounds
- If the handlebar bag has straps, make sure the straps can not get into the front wheel
- Fully stop the bicycle before you open or close the handlebar bag
- If the handlebar bag has a water bottle, fully stop the bicycle before you remove the water bottle from or return the water bottle to the handlebar bag
- Do not attach the handlebar bag in such a way that it obstructs the visibility of the front reflector bracket when viewed from the front

Handlebar Bag (on some models)

Attach the handlebar bag to the handlebar:

NOTE: Wash the water bottle fully before use.

- Open the fasteners of the handlebar bag
- Put the handlebar bag against the front of the handlebar
- Wrap the fasteners around the handlebar and push the fasteners together
- If the handlebar bag has a water bottle, push it into the bag.

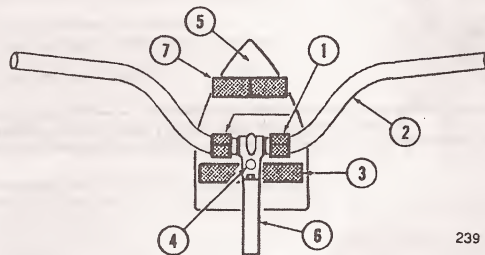
Handlebar / Stem Bag (on some models)

1. Put the handlebar / stem bag in position:

- Loosen the fasteners of the handlebar / stem bag
- Hold the handlebar / stem bag against the front of the handlebar
 - Make sure the fasteners are against the handlebar and that the pointed end is up.

2. Attach the handlebar / stem bag to the handlebar and the stem:

- Wrap the two fasteners [1] around the handlebar [2] and press them together
- If the handlebar / stem bag has fastener [3], wrap it loosely over the head of the handlebar clamp bolt [4] and press no more than one inch of it together
- Fold the pointed part of the handlebar / stem bag [5] back and down over the stem [6]
- Wrap fastener [7] around the stem and press it together.



239

Frame Bag (on some models)



WARNING: Attach a frame bag to the bicycle frame as written in these instructions:

- Do not attach a frame bag to any other part of the bicycle
- Fully stop the bicycle before you open or close the frame bag
- If the frame bag has a water bottle, fully stop the bicycle before you get the water bottle from or return the water bottle to the frame bag.

Assemble the frame bag to the bicycle frame:

- Loosen the fasteners on the frame bag
- Put the frame bag under the top tube and in front of the seat tube of the bicycle frame
- Wrap each fastener around the frame tube and press it together.

NOTE: Fully wash the water bottle before use.

NOTE: Your bicycle may have one or more of the following accessories. Use the following instructions to install the accessories for your bicycle.

- Make sure you assemble each accessory so it does not interfere with the correct movement or operation of the steering, the brake lever(s), and the shift control(s) of the bicycle.

WARNING: Do not steer the bicycle by holding onto any of these accessories. When your hands are off the handlebar grips, your ability to control the bicycle is decreased.

Streamers (on some models)

Assemble a streamer to each grip:

- Push the arrowhead or the plug of a streamer fully into the end of each grip.



191

Mirror (on some models)

Assemble the mirror to the handlebar as shown:

- Put the mirror in a position that is comfortable to the rider
- Put the bottom nut on the mirror just so one or two threads are through the bottom nut
- Do not tighten the bottom nut
- Tighten the top nut.



Bell (on some models)

Assemble the bell on the handlebar:

- Put the bell in a position that is comfortable to the rider



193

Horn (on some models)

Assemble the horn to the handlebar:

- Put the horn in a position that is comfortable to the rider.



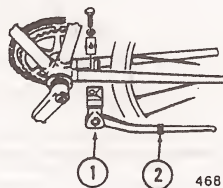
194

Kickstand

Assembly

Assemble the kickstand to the bicycle frame:

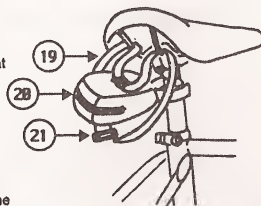
- Put the kickstand [1] under the bicycle frame
- Assemble the hardware to the kickstand and the bicycle frame
- Align the kickstand with the bicycle frame
- Tighten the bolt
 - The kickstand may be adjustable. If so, loosen screw [2] and move kickstand in or out so bicycle is stable when standing
- Tighten screw.



Seat Bag

Attach the seat bag to the bottom of the seat and to the seat post:

- Open the fasteners [19] of the seat bag [20]
- Put the seat bag against the bottom of the seat
- Wrap the fasteners around the seat post and around the frame that is under the seat as shown
- Feed the strap end without the plastic loop sewn to it through the plastic loop [21] of the other end, and attach it back onto itself with the Velcro fastener



WARNING: Some models have rear reflectors mounted to the seatpost. Make sure the position of the rear bag does not interfere with the visibility of the rear reflector when viewed from behind.



WARNING: Do not carry any items in the seat bag which weigh more than two pounds. Fully stop the bicycle before you open or close the seat bag.

NOTE: Your bicycle may have one or more of the following accessories. Use the following instructions to install the accessories for your bicycle.

- Make sure you assemble each accessory so it does not interfere with the correct movement or operation of the steering, the brake lever(s), and the shift control(s) of the bicycle.

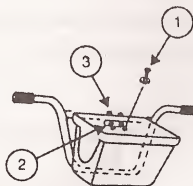
WARNING: Do not steer the bicycle by holding onto any of these accessories. When your hands are off the handlebar grips, your ability to control the bicycle is decreased.

Handlebar Basket and Handlebar Bags

BASKET

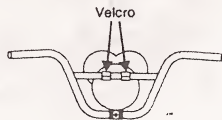
Assemble the basket to the handlebar:

- Insert the screws with washer [1] as shown through handlebar mounting bracket, making sure to place the flat washer with elongated holes [2] between the round washer and the plastic basket.
- Tighten with nuts [3] on backside.



BAGS

There are several different styles of bags, but all bags attach with simple velcro enclosures around the handlebar cross bar or around the cross bar pad.



Pad Sets

Assemble the pads in the correct location as shown.

- Attach with the sewn in Velcro fasteners.



WARNING: Failure to install properly could result in serious injury.



Fork and Handlebar - Assembly

Your bicycle may be equipped with one of the following fairings.

STYLE 1

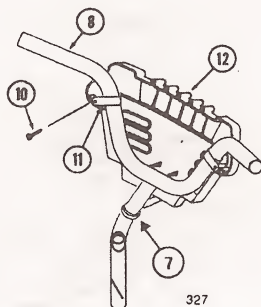
1. Assemble the fairing to the handlebar:

- Remove the screws [10] and the clips [11] from the back of the fairing [12]
- Put the handlebar through the ring [7] of the fairing
- Put a clip around each side of the handlebar
- Pull the fairing up onto the front of the handlebar
- Put a screw through each clip and into the boss on the back of the fairing



CAUTION: Do not overtighten the screws. The bosses can strip out if you overtighten the screws.

- Tighten the screws.



STYLE 2

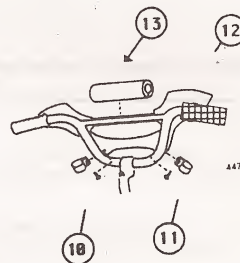
1. Assemble the fairing to the handlebar:

- Remove the screws [10] and the clips [11] from the back of the fairing [12]
- Put a clip [11] around each side of the handlebar
- Position the fairing onto the front of the handlebar
- Put a screw through each clip and into the boss on the back of the fairing
- Install the handlebar pad [13] with the velcro enclosure.



CAUTION: Do not overtighten the screws. The bosses can strip out if you overtighten the screws.

- Tighten the screws.



Repair and Service



WARNING:

- Inspect the bicycle frequently. Failure to inspect the bicycle and to make repairs or adjustments, as necessary, can result in injury to the rider or to others. Make sure all parts are correctly assembled and adjusted as written in this manual and any "Special Instructions".
- Immediately replace any damaged, missing, or badly worn parts.
- Make sure all fasteners are correctly tightened as written in this manual and any "Special Instructions". Parts that are not tight enough can be lost or operate poorly. Overtightened parts can be damaged. Make sure any replacement fasteners are the correct size and type.
- If your frame is aluminum, inspect the bicycle frame carefully and frequently. Aluminum frames can develop very small cracks due to stress, severe shocks, etc. If you see any small cracks, stop riding the bicycle. Have the frame inspected by a qualified professional at a bicycle service shop before riding the bicycle again.

NOTE: Have a bicycle service shop make any repairs or adjustments for which you do not have the correct tools or if the instructions in this manual or any "Special Instructions" are not sufficient for you.

Chain Adjustment

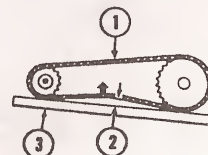
Maintenance

The chain must be at the correct tightness. If too tight, the bicycle will be difficult to pedal. If too loose, the chain can come off the sprockets.



WARNING: The chain must remain on the sprockets. If the chain comes off the sprockets, the coaster brake will not operate.

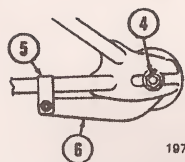
When the chain [1] is at the correct tightness, you can pull it one-half inch [2] away from a straightedge [3] as shown.



Adjust the tightness of the chain as follows:

- Loosen the axle nuts [4] of the rear wheel
- Loosen the clamp [5] on the brake arm [6], but do not remove the nut and the screw from the clamp

NOTE: Make sure the rear wheel is in the center of the bicycle frame.



- Move the rear wheel forward or backward as necessary, until you can pull the chain one-half inch away from a straightedge
- Hold the wheel in this position and tighten the axle nuts to the recommended torque of 14 ft.-lbs.
- Tighten the brake arm clamp.

Tires

Maintenance

Frequently check the tire inflation pressure because all tires lose air slowly over time. For extended storage, keep the weight of the bicycle off the tires.

WARNING: Do not ride or sit on the bicycle if either inner tube is under inflated. This can damage the tire and inner tube. Do not use unregulated air hoses to inflate the inner tubes. An unregulated hose can suddenly over inflate bicycle tires and cause them to burst.

Use a hand or a foot pump to inflate the inner tubes. Service station meter-regulated air hoses are also acceptable. The correct inflation pressure is shown on the tire sidewall.

Before adding air to any tire, make sure the edge of the tire (the bead) is the same distance from the rim, all around the rim, on both sides of the tire. If the tire does not appear to be seated correctly, release air from the inner tube until you can push the bead of the tire into the rim where necessary. Add air slowly and stop frequently to check the tire seating and the pressure, until you reach the correct inflation pressure as indicated on the tire sidewall.

Replace worn or defective tires and inner tubes.

Inspection of the Bearings

Maintenance

Frequently check the bearings of the bicycle. Have a bicycle service shop lubricate the bearings once a year or any time they do not pass the following tests.

Head Tube Bearings

The fork should turn freely and smoothly at all times. With the front wheel off the ground, you should not be able to move the fork up, down, or side-to-side in the head tube.

Crank Bearings

The crank should turn freely and smoothly at all times and the front sprockets should not be loose on the crank. You should not be able to move the pedal end of the crank from side-to-side.

Wheel Bearings

Lift each end of the bicycle off the ground and slowly spin the raised wheel by hand. The bearings are correctly adjusted if:

- The wheel spins freely and easily
- The weight of the spoke reflector, when you put it toward the front or rear of the bicycle, causes the wheel to spin back and forth several times
- There is no side-to-side movement at the wheel rim when you push it to the side with light force.

Lubrication

Maintenance

WARNING: Do not over lubricate. If oil gets on the wheel rims or the brake shoes, it will reduce brake performance and a longer distance to stop the bicycle will be necessary. Injury to the rider or to others can occur.

The chain can throw excess oil onto the wheel rim. Wipe excess oil off the chain.

Keep all oil off the surfaces of the pedals where your feet rest.

Using soap and hot water, wash all oil off the wheel rims, the brake shoes, the pedals, and the tires. Rinse with clean water and dry completely before you ride the bicycle.

Using a light machine oil (20W) and the following guidelines, lubricate the bicycle:

What	When	How
Brake Levers	every six months	Put one drop of oil on the pivot point of each brake lever
Caliper Brakes	every six months	Put one drop of oil on the pivot point of each caliper brake.
Brake Cables	every six months	Put four drops of oil into both ends of each cable. Allow the oil to soak back along the cable wire.
Pedals	every six months	Put four drops of oil where each pedal axle goes into the pedal.
Chain	every six months	Put one drop of oil on each roller of the chain. Wipe all excess oil off the chain.